ANNUAL REPORT 2025

Sustainable Land Management and Environmental Rehabilitation (SuLMER)

ABC Acronym List

SuLMER – Sustainable Land Management and Environmental Rehabilitation

CCCM – Camp Coordination and Camp Management

CiC – Camp-in Charge

SMS – Site Management Support

UDS – Unauthorized Dumping Sites

NBS – Nature Based Solutions

CLI – Community-led Initiative

CSI – Capacity Sharing Initiative

WaSH – Water Sanitation & Hygiene

SD – Site Development

NRM – Natural Resource and Management

CBP – Community Based Protection

LSDS – Livelihood and Skill Development Sector

SMSv – Site Management Support Volunteer

SoP – Standard Operating Procedure

CFW – Cash for Worker

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Executive Summary

The SuLMER Project, launched in 2021 in Kutupalong Mega Camp (Camps 1W & 2W), is a UNHCR initiative restoring degraded watersheds, improving environmental conditions, and reducing disaster risks for over 30,750 refugees and 400 host community members. Using Nature-Based Solutions (NBS) —stream rehabilitation, slope stabilization, riparian plantation, and waste management—the project enhances ecosystem resilience, public health, and biodiversity.
Through community-led interventions including stream cleaning, tree planting, homestead gardening, and Cash-for-Work, SuLMER has achieved:

In 2025, the SuLMER Extension Project expanded interventions to Camps 3, 4, 5, and 17, focusing on strengthening hydrological connectivity, biodiversity corridors, upstream water retention, and fire-response capacity. Implemented in close collaboration with WASH, Site Development (SD), Livelihoods, CBP, NRM partners, and the refugee community, the extension achieved measurable progress in environmental stabilization, water and waste management, and community resilience.

These interventions have strengthened watershed management, enhanced refugee self-reliance, and demonstrated effective multi-sectoral collaboration and community ownership, contributing directly to climate resilience, public health, and social cohesion within the Rohingya settlements.

Background and Context

The Rohingya refugee camps face persistent environmental challenges, including deforestation, land degradation, and soil erosion, which increase vulnerability to landslides and flooding. The SuLMER Extension Project was designed to mitigate these risks by restoring degraded ecosystems, strengthening watershed management, and promoting sustainable environmental practices. In 2025, the project expanded interventions to additional high-risk sub-blocks to maximize impact.

Rohingya refugee camps in Cox's Bazar continue to face environmental challenges including deforestation, slope instability, soil erosion, and water pollution. These issues increase the vulnerability of both refugees and host communities to flooding, landslides, and poor sanitation conditions.
The SuLMER project addresses these challenges by integrating environmental rehabilitation, disaster risk reduction, and nature-based solutions (NbS) into camp infrastructure and community practices. In 2025, the project expanded its interventions to extension sites in Camps 3, 4, 5, and 17, in addition to the existing sites in Camps 1W and 2W.

3. Project Objectives

The SuLMER Project aims to strengthen environmental sustainability and disaster resilience within Rohingya refugee camps through integrated watershed management and community-driven restoration initiatives. Key objectives include:

- Restore degraded land, streams, and slopes to reduce environmental risks and improve landscape stability.

- Restore improper drainage systems and mitigate severe water pollution through improved water management.
- Improve solid waste management systems, including the installation of waste traps and natural reservoir protection.
- Promote Nature-based Solutions (NbS) such as ECO-DRR and ecosystem restoration approaches.
- Support rationalized infrastructure planning, including shelters, latrines, bathing facilities, and communal structures.
- Develop safer access pathways, walkways, bridges, and solar street lighting to improve mobility and safety.
- Promote plantation initiatives, vegetable gardening, and livelihood-linked environmental restoration.
- Strengthen watershed management, stream rehabilitation, slope protection, and landscape stabilization.
- Enhance multi-sectoral coordination mechanisms, ensuring clear stakeholder roles and responsibilities among humanitarian partners.
- Encourage community engagement and environmental governance through structured groups and community-led initiatives.
- Address environmental pressures caused by rapid landscape changes and host community encroachment.

4. Key Activities Implemented

- Implemented slope stabilization measures across 12 sub-blocks, covering 20 hectares of high-risk areas.
- Conducted awareness sessions on environmental conservation, disaster risk reduction, and safe natural resource use, reaching over 3,500 households.
- Planted 25,000 trees and shrubs to restore degraded land and enhance soil retention.
- Engaged community volunteers and Majhis in monitoring environmental interventions to ensure sustainability.
- Coordinated with camp authorities and humanitarian partners to align activities with broader sectoral strategies.

4.1 Restoration of Streams, Drainage Systems, and Solid Waste Management

- Monitored and cleaned streams across all camps in collaboration with SMS actors.
- Developed and quarterly updated a Stream Monitoring and Cleaning SOP with SMS partners.
- Installed 37 waste traps on primary streams across 6 camps and conducted weekly cleaning through CfW or community support.
- Cleared 2,351 metres of streams and recovered 3,766 cubic feet of waste to maintain fluent water channels.
- Coordinated with CiCs to relocate encroaching community shelters and maintain playgrounds and communal spaces.

4.2 Plantation, Ecological Restoration, and Watershed Management

- Planted 809 tree seedlings, 1,050 bamboo seedlings, 500 metres of cover grass, and 160 Dolkolmi plants for slope stabilization and stream protection.
- Established and supported community-led groups: Women Environmental Groups, Women Livelihood Groups, Youth Environmental Clubs, and Watershed Management Groups.
- Promoted community-led ecological restoration through gardens, over-stream structure maintenance, and regular cleaning activities.

4.3 Infrastructure and Disaster Risk Reduction Interventions

- Rehabilitated pathways, walkways, bridges, and fencing.
- Installed solar street lighting to enhance community safety.
- Replaced a bamboo bridge with a metal bridge in Camp 1W.
- Implemented streambank protection works and live fencing to mitigate slope instability.
- Conducted vegetation planting and NbS approaches to reduce fire and flood hazards.

4.4 Community Awareness, Ownership, and Governance

- Reached 1,654 individuals through 488 door-to-door sensitization sessions.
- Facilitated 12 Women Environmental Group meetings, 9 Women Livelihood Group meetings, 14 Youth Environmental Club meetings, and 4 Watershed Management Group meetings.
- Transferred monitoring and reporting responsibilities for waste traps and stream maintenance to community members, strengthening accountability and sustainability.

4.5 Monitoring, Technical Assessment, and Coordination

- Conducted GIS mapping, civil planning, and technical verification visits with UNHCR and partners.
- Developed a live dashboard to track streams, flooding patterns, and waste management progress in real time.
- Coordinated with BRAC, Shelter, NRM, and other sector partners to ensure integrated programming.
- Handover of interventions to SMS partner teams for completion in 2026 based on funding availability.

IMPACT SuLMER Site 1 in numbers[2]

Community members planted **809 tree seedlings, 1,050 bamboo seedlings, 500 metres of cover grass, and 160 Dolkolmi (Ipomoea carnea) plants** as live fencing to support slope stabilization and stream protection.

Conducted **488 door-to-door sensitization sessions, reaching 1,654 elderly women, youth, and girls**. Key topics included stream safety, maintenance of over-stream structures, seedling care, vegetable gardening, waste management, and flood preparedness. To reinforce group-based learning and leadership.

Facilitated a total **of 39 group meetings across target camps,** including 12 Women Environmental Groups, 9 Women Livelihood Groups, 14 Youth Environmental Clubs, and 4 Watershed Management Groups. Youth Environmental Clubs also conducted cross-learning visits to enhance peer-to-peer learning and capacity building.

864 m	Of length water canal and 24-hectare catchment area	Inhabited by more than 30,000 refugees and host population in Camps 1W and 2W,
01	Steel bridge/Site Development	In coordination with Shelter partners, Acted supported the replacement of one bamboo structure with metal bridge in Camp 1W
2,351m	Of Stream cleaned with multiple cleaning campaign	
3,766 ft³	Of organic and inorganic Waste recovered	In coordination with WaSH partners, Organic waste transported to the Solid Waste Management plant while inorganic waste transported to the landfill located in Camp 20Ext.
329 m	Fencing	
220 m	Of streambank protection	
12 m	Of Pathways/walkway	
01	Playground grass carpeting	

IMPACT SuLMER Extension in numbers[2]

Strengthened **multi-sectoral coordination mechanisms** across humanitarian sectors.

Implementation of **Nature-based Solutions (NbS)** contributing to climate resilience and ecosystem recovery. Plantation of **25,000 trees and shrubs**, increasing vegetation cover and ecological restoration.

Establishment of **community-led environmental governance groups** supporting sustainable resource management.

2,266 m	Of length water canal	Coverage camps 3, 4, 5, & 17
01	Steel bridge/Site Development	In coordination with Shelter partners, Acted supported the replacement of one bamboo structure with metal bridge in Camp 1W
2,475 m	Of Stream excavated & Shaped	
2,882 m	Of Stream bank protected through protection wall.	
883 m	Of pathway construction	
160 m	Of Bamboo Fencing	
2,675 ft³	Of organic and inorganic Waste recovered within limited timeframe	In coordination with WaSH partners, Organic waste transported to the Solid Waste Management plant while inorganic waste transported to the landfill located in Camp 20Ext.
01	Playground grass carpeting	

From Neglected Field to Safe Playground for the Community

Previously, the community had very limited access to safe recreational spaces for children and youth. Due to the absence of a proper playground, many children used to play on the roadside, which exposed them to frequent safety risks, including traffic-related incidents. This situation created concern among community members, as children were often forced to play in unsafe environments.

Although there was an open field located beside Mochora Bazar, it remained largely unusable. Shop owners from the nearby market regularly dumped waste in the area, which made the field dirty and unsuitable for recreational use. In addition, during the monsoon season, the field would become flooded due to poor drainage and the absence of any protective structures. As a result, the area remained inaccessible for long periods throughout the year. Because of these conditions, children and youth had very limited opportunities to play football or participate in outdoor activities. The lack of a usable field also reduced opportunities for social interaction and healthy recreation among young people in the community.

Furthermore, community members faced difficulties passing through the area, as there was no proper pathway or connectivity around the field. The absence of basic infrastructure and poor environmental conditions therefore limited both mobility and community use of the space.

"Before, we had no proper field and often played on the roadside, which was dangerous. The field near Mochora Bazar was blocked by waste and flooded in the monsoon, so we rarely had a place to play. After the SuLMER project build the bank wall, walkway, and bridge, and cleaned the area, the field is now safe and accessible. Youth can play football anytime, early people can sit and chat, and the whole community enjoys a clean, safe, and friendly space."

— Mohammed Faisal (18), E02 Sub-block

Transforming Canal-Side Land into a Productive Community Space

Empty lands adjacent to a canal remained largely unused due to frequent flooding during the monsoon season and the dumping of waste, which eventually flowed into the canal. Poor accessibility also made it difficult for community members to walk through the area, limiting its use and creating environmental concerns.

Following the completion of the SuLMER interventions, including the construction of a bank protection and a walkway, the area has significantly improved. The site is now clean, safe, and accessible for the community. Beneficiaries noted that the improved infrastructure has also reduced the risk of flooding during the rainy season, making the surrounding environment more stable and secure.

As a result of these improvements, households living on both sides of the SuLMER area have started homestead vegetable gardens. Through coordination by SMS with livelihood partners, community members received agricultural inputs and technical support to initiate small-scale cultivation. Currently, more than 80 families are receiving input support from livelihood partners and cultivating vegetables within the SuLMER site. SMS is also collaborating with livelihood partners to extend support to additional community members

living around the SuLMER area. Families are now able to grow fresh vegetables for household consumption and sell surplus produce to generate additional income, contributing to improved environmental conditions, better community access, and enhanced livelihood opportunities.

"Previously, the area beside my shelter next to the canal remained unused due to frequent flooding during the monsoon and waste dumping, which also made it difficult for community members to walk through. After the SuLMER project constructed the bank protection wall and walkway, the place became clean, safe, and accessible. Now, my family and nearby households have started homestead vegetable gardens with support from SMS and livelihood partners. We can grow fresh vegetables for our families and sell the surplus to earn a small income, improving both our environment and livelihoods."

— Abdur Rahim (36), G04 Sub-block

Strengthening Household Resilience through Cash for Work (CFW) Opportunities

Livelihood opportunities in the camps remain extremely limited, leaving many refugee households struggling to meet their basic needs. While some families receive fresh food items through WFP FFC assistance programs, this support is only available to a limited number of categorized households. As a result, a significant portion of the community does not have regular access to fresh and nutritious food. These families often depend on small income-generating opportunities or temporary support mechanisms to purchase essential food items from local markets.

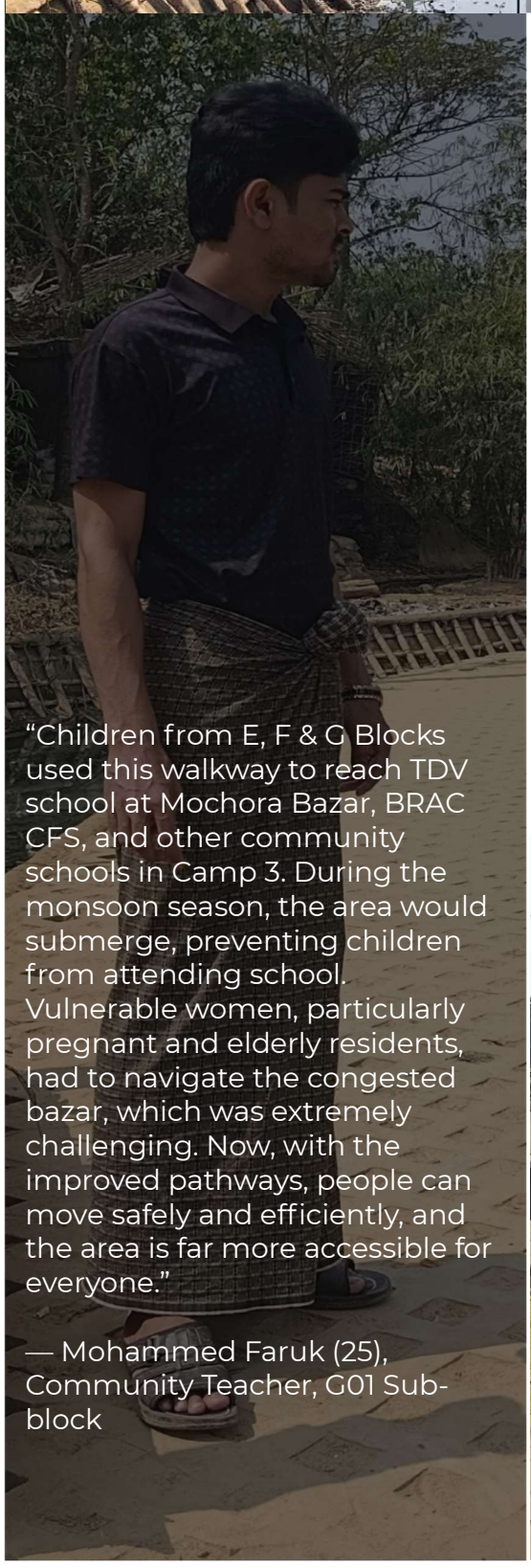
In this context, Cash for Work (CFW) opportunities have become an important source of income for many vulnerable households. The program enables community members to engage in short-term work activities while earning cash that can be used to support their families. Through this income, households are able to purchase fresh food items and cover other essential needs, which helps improve their overall food consumption and well-being.

In Camp 3 and Camp 4, a total of 413 individuals (114 men and 299 women) participated in the CFW program. The inclusion of a significant number of women also contributed to promoting women's participation in livelihood activities and strengthening their role in supporting household income. Overall, the CFW initiative has played a vital role in supporting vulnerable families, enhancing their coping capacity, and contributing to improved household resilience within the camp community

" I live near the SuLMER intervention area with my large family of ten members. Due to our family size and the limited assistance available, it has always been difficult for us to meet our daily food needs. I had the opportunity to work in the SuLMER project through Cash for Work (CFW) activities. The income I earned from this work helped me support my family and allowed us to buy meat, vegetables, fruits, and other nutritious food items for several months. This opportunity made a real difference for our household and helped us manage our food needs during that period. I am now hoping to get more chances to participate in CFW activities in the future so that I can continue supporting my family and improving our food situation."

Mohammed Rofique (23), E05 block

Paving the Way for a Safe and Inclusive Environment



"Children from E, F & G Blocks used this walkway to reach TDV school at Mochora Bazar, BRAC CFS, and other community schools in Camp 3. During the monsoon season, the area would submerge, preventing children from attending school. Vulnerable women, particularly pregnant and elderly residents, had to navigate the congested bazar, which was extremely challenging. Now, with the improved pathways, people can move safely and efficiently, and the area is far more accessible for everyone."

— Mohammed Faruk (25), Community Teacher, G01 Sub-block

Prior to the SuLMER intervention, the area was characterized by severe challenges in accessibility, safety, and environmental conditions. During the rainy season, pathways were frequently submerged, rendering movement extremely difficult for residents—particularly pregnant women, elderly individuals, and persons with disabilities. Children were also disproportionately affected, as they were unable to leave their shelters safely or access recreational and educational spaces.

The deteriorated conditions compelled community members from approximately 3,600 households to take long, circuitous routes to reach essential services, such as the WFP food distribution outlet. Vulnerable groups, including the elderly and pregnant women, faced significant hardship navigating the densely crowded Mochora Bazar. Children's access to nearby facilities, including the MPC centre, was similarly restricted, limiting their participation in educational and community activities.

In addition, the neglected state of the area exacerbated environmental concerns. Persistent waterlogging and accumulated waste further diminished the usability of the site, presenting serious health and safety risks. Collectively, these conditions rendered the area unsafe, largely inaccessible, and deficient in basic infrastructure, undermining both the mobility

Community-led Initiative for a Cleaner Environment

The Rohingya community living around the SuLMER area in G-Block and Mochora Bazar committee have taken an encouraging step toward protecting their environment through improved waste management. Previously, several parts of the area were used as unauthorized dumping sites, making the surroundings dirty and unhealthy for nearby residents.

After the SuLMER project the area became cleaner and more organized. These visible improvements inspired community members to take responsibility for maintaining the environment.
The Bazar Committee played a key role in mobilizing residents and raising awareness about proper waste disposal. As a result, community members now actively discourage dumping waste in unauthorized places and participate in cleaning activities around the SuLMER site.

Nowadays, the area that once suffered from waste dumping is being preserved as a clean and safe space for the community. This initiative has strengthened community ownership and demonstrated the positive impact of collective action.

"Before, many people used this place to throw waste, and the area became very dirty. After the SuLMER development, we understood the value of keeping the environment clean. Our committee discussed the issue with community members and encouraged everyone to stop dumping waste here. Now people are more aware, and we work together to keep the area clean so that everyone in the community can benefit from this improved space."

— Ruhul Amin (45), Secretary, Mochora Bazar Committee

6. Key Achievements and Results

- Restored 20 hectares of degraded land, reducing landslide risk for over 1,200 households.
- Enhanced community knowledge: 3,500 households trained in sustainable practices.
- Increased vegetation cover: 25,000 trees planted, improving soil stability and biodiversity.
- Operational collaboration strengthened: joint planning with camp authorities and partners ensured integration of environmental measures across sectors.
- Successfully stabilized over 5,000 metres of streams and channels.
- 37 waste traps installed and maintained, reducing water pollution and supporting fluid drainage.
- Community members actively engaged in environmental restoration and watershed management activities.
- Rehabilitation of infrastructure improved access and safety for refugees and host communities.
- Strengthened multi-sectoral coordination and clearly defined partner roles ensured integrated interventions.
- Nature-based solutions contributed to slope protection, flood mitigation, and ecological sustainability.

7. Key Impact and Changes by the Interventions

- Reduced environmental risks, contributing to safer living conditions in high-risk zones.
- Improved ecosystem functionality and soil stability, mitigating potential hazards during heavy rainfall.
- Increased community ownership of environmental restoration activities, enhancing resilience and sustainability.
- Reduced risk of flooding, landslides, and waterborne diseases in targeted camps.
- Increased vegetation cover and restored degraded landscapes, improving watershed management.
- Enhanced refugee self-reliance through participation in livelihood-linked environmental activities.
- Strengthened community governance and ownership, promoting sustainability of interventions.

8. Community Participation & Social Inclusion

- Engaged 150 community volunteers, including women and youth, in restoration and monitoring activities.
- Promoted social inclusion by ensuring vulnerable households were prioritized for awareness sessions and interventions.
- Feedback mechanisms were established, allowing community members to contribute to project decision-making.
- 413 unskilled CfWs (114 men, 299 women) actively involved in SuLMER interventions.
- Community-led groups facilitated environmental stewardship, peer learning, and leadership.
- Special attention to inclusion of women, youth, and vulnerable households in planting, stream monitoring, and awareness activities.
- Structured mechanisms enabled community members to monitor, report, and maintain interventions.

9. Operational Collaboration

- Coordinated with humanitarian partners, including sector NGOs and camp authorities, to integrate environmental interventions with protection and shelter initiatives.
- Conducted joint field visits and planning meetings to align project activities with broader camp development goals.
- Multi-sectoral coordination ensured integration with WASH, SD, Livelihoods, CBP, and NRM activities.

- Close technical coordination with UNHCR, BRAC, and SMS partners ensured alignment of activities with camp-level planning and risk-reduction priorities.
- Joint verification visits, live dashboards, and regular coordination meetings strengthened accountability and real-time progress tracking.

10. Challenges and Lessons Learned

- High population density limited available land for restoration, requiring adaptive planning.
- Heavy rainfall and soil instability posed operational challenges, highlighting the importance of early monitoring and risk mitigation.
- Lessons learned emphasize strengthening community engagement, integrating environmental measures into camp-wide planning, and increasing adaptive capacity.
- Limited land availability in high-density camps constrained slope stabilization and restoration efforts.
- Heavy rainfall and seasonal flooding required adaptive planning and prioritization of upstream canals.
- Majhi objections prevented the establishment of Men's groups, highlighting the need for culturally sensitive community engagement approaches.
- Lessons emphasized strengthening multi-sectoral coordination, community ownership, and adaptive planning for environmental interventions.

11. Recommendations & Way Forward

- Scale up watershed management interventions to additional high-risk areas.
- Strengthen community-led monitoring to ensure sustainability.
- Continue joint planning with partners to integrate environmental and humanitarian objectives.
- Promote gender-inclusive participation in future environmental initiatives.
- Expand watershed management and NbS interventions in additional high-risk zones.
- Scale up community ownership models for monitoring, stream maintenance, and ecological restoration.
- Continue coordination with SMS, Shelter, and NRM partners to integrate interventions across sectors.
- Promote gender-inclusive participation and youth leadership in environmental and livelihood-linked activities.
- Ensure sustainability by linking interventions to community governance structures and long-term ecological planning.